## ABSTRACT OF THE DISCLOSURE

A technique enables a server, such as a filer, configured with a plurality of virtual servers, such as virtual filers (vfilers), to participate in a plurality of private network address spaces having potentially overlapping network addresses. The technique also enables selection of an appropriate vfiler to service requests within a private address space in a manner that is secure and distinct from other private address spaces supported by the filer. An IPspace refers to each distinct address space in which the filer and its storage operating system participate. An IPspace identifier is applied to translation procedures that enable the selection of a correct vfiler for processing an incoming request and an appropriate routing table for processing an outgoing request.